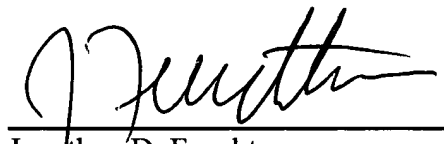
REMARKS

The above-described amendments to the Specification, Abstract, and Claims correct informalities.

The Examiner is invited to contact the undersigned if a telephone interview would expedite prosecution.

Respectfully submitted,

PIPER MARBURY RUDNICK & WOLF



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APPENDIX

Clean Copy Of Amended Claims

1 (Amended). Method of processing X streams of information symbols to be transmitted on Y communication channels, X and Y being positive integers, wherein the Y communication channels simultaneously occupy a transmission resource organized as successive frames, wherein the successive frames include compressed-mode frames each having at least one inactive period during which no symbol is transmitted, wherein the information symbols of each stream i ($1 \leq i \leq X$) are transmitted in successive transmission time intervals each comprising F_i consecutive frames, F_i being a positive integer, and wherein, for each transmission time interval relating to a stream i ($1 \leq i \leq X$), integers E_i, ΔN_i^{TTI} and ΔN^{CM} are defined such that $E_i > 0$, $\Delta N_i^{CM} < 0$ if [the] said transmission time interval comprises at least one compressed mode frame and $\Delta N_i^{CM} = 0$ if [the] said transmission time interval does not comprise any compressed-mode frame, the method comprising the following steps for each transmission time interval relating to a stream i ($1 \leq i \leq X$):

forming a first sequence of E_i coded symbols from information symbols of stream pertaining to said transmission time interval;

forming a second sequence of symbols including $E_i + \Delta N_i^{TTI} + \Delta N_i^{CM}$ symbols extracted from the first sequence and ΔN_i^{CM} marked symbols;

forming a third sequence of symbols by a permutation of the symbols of the second sequence;

distributing the symbols of the third sequence into F_i segments of consecutive symbols, the F_i segments being respectively assigned to the frames of said transmission time interval; and

for each frame of said transmission time interval, forming a fourth sequence of symbols extracted from the segment assigned to said frame, said permutation and the placing of the marked symbols in the second sequence when said transmission time interval comprises at least one compressed-mode frame being such that each marked symbol belongs, in the third sequence, to a segment assigned to a compressed-mode frame, and the following steps for each frame:

forming a fifth sequence of symbols including the symbols of the fourth sequence output for said frame in relation to each stream;

distributing the symbols of the fifth sequence into Y segments of symbols, the y segments being respectively assigned to the Y communication channels;

for each communication channel, forming a sixth sequence of symbols extracted from the segment assigned to said communication channel;

for each communication channel, forming a seventh sequence of symbols by a permutation of the symbols of the sixth sequence; and

transmitting on each communication channel, in time slots of said frame, symbols extracted from the seventh sequence, each of said marked symbols being deleted before transmission on each communication channel when said frame is in compressed mode, so as to provide said inactive period within the frame.

2. (Amended) Method according to Claim1, wherein said marked symbols are kept until the seventh sequences when said frame is in compressed mode, without being extracted from the seventh sequences for transmission.

3. (Amended) Method according to Claim 1 wherein additional marked symbols are inserted into the second or the fifth sequence these symbols being kept until the seventh sequences so as to be transmitted with zero transmission power.

4. (Amended) Device for processing X streams of information symbols to be transmitted on Y communication channels, X and Y being positive integers, the Y communication channels simultaneously occupying a transmission resource organized as successive frames, the successive frames including compressed-mode frames each having at least one inactive period during which no symbol is transmitted, the information symbols of each stream i ($1 \leq i \leq X$) being transmitted in successive transmission time intervals each comprising F_i consecutive frames, F_i being a positive integer, integers E_i, ΔN_i^{TTI} and ΔN_i^{cm} being defined for each transmission time interval relating to a stream i ($1 \leq i \leq X$), with $E_i > 0$, $\Delta N_i^{cm} < 0$ if said transmission time interval comprises at least one compressed-mode frame and $\Delta N_i^{cm} = 0$ if said transmission time interval does not comprise any compressed-mode frame, the device comprising:

means for forming a first sequence of E_i coded symbols from information symbols of each stream i ($1 \leq i \leq X$) pertaining to a transmission time interval;

means for forming, for each transmission time interval relating to a stream i ($1 \leq i \leq X$), a second sequence of symbols including $E_i + \Delta N_i^{TTI} + \Delta N_i^{CM}$ symbols extracted from the first sequence and ΔN_i^{CM} marked symbols;

means for forming a third sequence of symbols by a first permutation of the symbols of each second sequence;

means for distributing the symbols of each third sequence, formed for a transmission time interval relating to a stream i ($1 \leq i \leq X$), into F_i segments of consecutive symbols respectively assigned to the frames of said transmission time interval, and for forming F_i fourth sequences of symbols respectively extracted from the segments assigned to said frames;

means for forming, for each frame, a fifth sequence of symbols including the symbols of the fourth sequence output for said frame in relation to each stream i ($1 \leq i \leq X$);

means for distributing the symbols of each fifth sequence into Y segments of symbols respectively assigned to the Y communication channels;

means for forming a sixth sequence of symbols extracted from the segment assigned to each communication channel; and

means for forming a seventh sequence of symbols by a second permutation of the symbols of each sixth sequence, and for transmitting, in time slots of each frame on each communication channel, symbols extracted from the seventh sequence, wherein the first permutation and the placing of the marked symbols in the second sequence, formed for a transmission time interval relating to a stream when said transmission time interval comprises at least one compressed-mode frame, are such that each marked symbol belongs, in the third sequence formed for said transmission time interval, to a segment assigned to a compressed-mode frame, each of said marked symbols being deleted before transmission on each communication channel so as to provide said inactive period within the frame.

5. (Amended) Device according to Claim 4, wherein the means for forming the third, fourth, fifth, sixth and seventh sequences of symbols are arranged to keep the said marked symbols until the seventh sequences formed for each compressed-mode frame, whereby said marked symbols are not extracted from the seventh sequences for transmission.

6. (Amended) Device according to Claim 4 comprising means for inserting, into the second or fifth sequences, additional marked symbols which are kept until the seventh sequences so as to be transmitted with zero transmission power.

8. (Amended) Method of processing Y digital streams obtained from a received signal and comprising estimates of information symbols respectively transmitted along Y communication channels simultaneously occupying a transmission resource organized as successive frames, and pertaining to X transport channels, X and Y being positive integers, wherein the successive frames include compressed mode frames each having at least one inactive period during which no symbol is transmitted, and wherein the estimates of information symbols pertaining to each transport channel i ($1 \leq i \leq X$) are received in successive transmission time intervals each comprising F_i consecutive frames, F_i being a positive integer, the method comprising the following steps for each frame:

forming, in relation to each communication channel j ($1 \leq j \leq Y$), a first sequence composed of estimates extracted from the time slots of said frame and, when said frame is in compressed mode, of marked estimates placed at positions corresponding to the inactive period of said frame;

for each communication channel, forming a second sequence of estimates by a permutation of the estimates of the first sequence;

forming a third sequence of estimates including estimates of the second sequence output for each communication channel; and

distributing the estimates of the third sequence into X segments of consecutive estimates, the X segments being respectively assigned to the X transport channels, and the following steps for each transmission time interval relating to a transport channel:

forming a fourth sequence by concatenating the respective segments assigned to said transport channel for the frames of said transmission time interval;

permuting the estimates of the fourth sequence and forming a fifth sequence of estimates extracted from the permuted fourth sequence;

ignoring each marked estimate of the fifth sequence, and forming a sixth sequence of symbols on the basis of the other estimates of the fifth sequence; and

decoding the sixth sequence of estimates and outputting the decoded estimates.

9. (Amended) Method according to Claim 8, wherein the step of forming the third sequence for at least one frame comprises concatenating the second sequences formed for the Y communication channels and deleting at least one estimate having a determined position in the concatenated sequence.

10. (Amended) Method according to Claim 8, wherein the step of the fifth sequence for at least one transmission time interval relating to a transport channel comprises deleting at least one estimate having a determined position in the permuted fourth sequence.

11. (Amended). Device for processing Y digital streams obtained from a received signal and comprising estimates of information symbols respectively transmitted along Y communication channels simultaneously occupying a transmission resource organized as successive frames, and pertaining to X transport channels, X and Y being positive integers, the successive frames including compressed-mode frames each having at least one inactive period during which no symbol is transmitted, and the estimates of information symbols pertaining to each transport channel i ($1 \leq i \leq X$) being received in successive transmission time intervals each comprising F_i consecutive frames, F_i being a positive integer, the device comprising:

means for forming, for each frame in relation to each communication channel, a first sequence composed of estimates extracted from the time slots of said frame and, when said frame is in compressed mode, marked estimates placed at positions corresponding to the inactive period of said frame;

means for forming, for each frame in relation to each communication channel, a second sequence of estimates by permutation of the estimates of the first sequence;

means for forming, for each frame, a third sequence of estimates including estimates of the second sequence output for each communication channel;

means for distributing the estimates of the third sequence formed for each frame into X segments of consecutive estimates, the X segments being respectively assigned to the X transport channels;

means for forming a fourth sequence for each transmission time interval relating to a transport channel, by concatenating the respective segments assigned to said transport channel for the frames of said transmission time interval;

means for permuting the estimates of the fourth sequence formed for each transmission time interval relating to a transport channel, and for forming a fifth sequence of estimates extracted from the fourth permuted sequence;

means for deleting each marked estimate of the fifth sequence formed for each transmission time interval relating to a transport channel, and for forming a sixth sequence of symbols on the basis of the other estimates of the fifth sequence; and

means for decoding the sixth sequence of estimates formed for each transmission time interval relating to a transport channel, to output the decoded estimates.

12 (Amended) Device according to Claim11, wherein the means for forming the third sequence of estimates comprise means for concatenating the second sequences formed for the Y communication channels and means for deleting at least one estimate having a determined position in the concatenated sequence.

13. (Amended) Device according to Claim 11, wherein the means for forming the fifth sequence comprise means for deleting at least one estimate having a determined position in the permuted fourth sequence.--